

validation of final SPACE scores included clinical validity (against Harvey-Bradshaw score), concurrent validity (against Treatment Satisfaction Questionnaire for Medication –TSQM–), internal consistency reliability, test-retest reliability and responsiveness. **RESULTS:** The main population included 279 patients (mean age=36, 56% female). Quality of completion was good (55–67% of patients with no missing items). Four items were little informative and thus removed from the final questionnaire. Eleven scores were defined: disease control, three transition scales (non-anal symptoms, anal symptoms, quality of life), side-effects, treatment convenience, three expectation disconfirmation scales (efficacy, side-effects, convenience), satisfaction with treatment, and motivation. Psychometric scores matched standards for clinical validity (better perception for patients with less severe disease), concurrent validity (e.g. correlation between SPACE satisfaction with treatment and TSQM satisfaction scores=0.59), internal consistency reliability (Cronbach's alphas=0.67–0.93), test-retest reliability (intraclass correlations=0.62–0.91), and responsiveness (better perception improvement for improved patients). **CONCLUSIONS:** The SPACE questionnaire is a valid, reliable and responsive instrument to measure patients' satisfaction with anti-TNF treatment in severe Crohn's disease.

GASTROINTESTINAL DISORDERS - Health Care Use & Policy Studies

PGI38

THE CONSUMPTION OF PROTON-PUMP INHIBITORS IN SLOVAKIA

Gatšalová K¹, Bellova K², Foltan V¹, Majtás J²

¹Faculty of Pharmacy, Comenius University, Bratislava, Slovak Republic, ²Comenius University, Bratislava, Slovak Republic

OBJECTIVES: Proton-pump inhibitors main action is a pronounced and long-lasting production of gastric acid production. They have largely replaced H3/4 antagonists in the treatment of acute peptic ulcer disease. Peptic ulcer affects 10% of population with prevalence 2–3%. The incidence is higher in male population. Empiric treatment with proton pump inhibitors provides sustained symptomatic relief in 70–80% of patients. **METHODS:** Data of proton-pump inhibitors consumption within 2008–2011 were gained from Slovak Institute of Drug Control and statistically evaluated. Wholesalers in Slovakia are legally obliged to provide SIDC with financial and physical units of supplied medicines. **RESULTS:** Financial expenditures of pantoprazole showed upward trend from 1.2 mil. € in 2008 to 3.1 mil. € in 2010 and then plunged to 2.7 mil € in 2011. The costs of esomeprazole rose gradually from 42 417 € in 2008 to 158 665 € in 2011. The consumption expressed in number of packages increased within the followed period most remarkably by pantoprazole from 63 924 packages in 2008 to 771 197 packages in 2011. Similar increase in number of packages was observed by esomeprazole, which rocketed from 3 090 packages in 2008 to 27 650 in 2011. Continuous decline was detected by esomeprazole and lansoprazole in both financial and physical units. **CONCLUSIONS:** The whole consumption of proton-pump inhibitors decreased due to interventions of Ministry of Health in Slovak Republic including categorizations and reference pricing. Treatment adjustment decided by physician are also contributing factor. High utilization of pantoprazole is caused by new medicines market release.

PGI39

BUDEGT IMPACT ANALYSIS OF HCV THERAPY COST AFTER BOCEPREVIR ADDITION TO STANDARD THERAPEUTIC REGIME

Manova M¹, Savova A¹, Stoimenova A¹, Petrova G²

¹Medical University Sofia, Faculty of Pharmacy, Sofia, Bulgaria, ²Medical University, Faculty of Pharmacy, Sofia, Bulgaria

OBJECTIVES: To evaluate the changes in the cost of HCV therapy after boceprevir addition to standard therapy. The analysis is made from the third party payer perspective for one year time horizon. **METHODS:** Budget impact model was used combining the HCV epidemiology data, and differences in the boceprevir efficacy in naive and experienced patients with relapse. The cost of pharmacotherapy was calculated for treatment naive (n=191) and experienced patients (n=98) alone, as well as for achieving sustained virological response. Standard therapy cost alone and standard therapy plus boceprevir was compared to derive the budget impact. **RESULTS:** Pharmacotherapy cost differs among subgroups of patients with heavier burden for the experienced cirrhotic patients (36,000 Euro). Increase in the cost of pharmacotherapy in treatment naive group is twice after boceprevir addition but efficacy is three times higher. Addition of boceprevir to treatment naive early responder patients led to the overall decrease in their cost of therapy to 29,000 Euro. The decrease in mean pharmacotherapy cost of standard regime was also observed after boceprevir addition thus influencing positively the overall treatment cost. For treatment experienced patients the efficacy is lower but still it is twice higher than that of the standard therapy. Achievement of sustained virological response in experienced group saves approximately 7,500 Euro per patient in comparison with standard therapy. **CONCLUSIONS:** Addition of boceprevir to standard HCV therapy led to the overall decrease in therapy cost mostly evident in treatment experienced patients.

PGI40

PHYSICIAN-INITIATED TREATMENT PATTERNS OF ULCERATIVE COLITIS (UC) PATIENTS IN THE UK: A REVIEW OF CHART-ABSTRACTED DATA

Yen L¹, Katic BJ²

¹Shire Development LLC, Wayne, PA, USA, ²Shire, Wayne, PA, USA

OBJECTIVES: Various treatment options exist for managing UC in the UK. Relapse-associated treatment patterns, and the degree to which treatment options differ by physician specialty, however, have not been studied. This study aimed to describe common relapse-related treatment patterns for UC, both overall and by physician specialty. **METHODS:** A retrospective chart review of UC patients diagnosed at least 1 year prior to the study was performed. General practitioners (GPs, 12) and gastro-

enterologists (GIs, 17) reported on treatments given to 91 patients who had experienced at least 1 flare in the past year. Treatment options (increasing dosage of existing treatment, new oral steroid prescription, topical prescription, other prescription, further investigation, and any hospitalization or surgery) were grouped into 8 distinct treatment patterns. Descriptive statistics and the Fisher exact test were used to assess treatment patterns by type and physician specialty, stratifying by UC status at last assessment (remission vs. mild/moderate). **RESULTS:** Top treatment patterns for UC relapse/flare included increasing the dosage of existing medication (19% of patients), prescribing a new oral steroid (19%) or prescribing a combination of 2 treatment options (22%). Any hospitalization or surgery was reported in 7 cases (8%). Adjusting for mild/moderate UC, GIs more often prescribed 2 or 3 combinations of treatment options compared to GPs (30% and 25% vs. 11.5% and 3.8%), and utilized any hospitalization/surgery as a treatment option (10% vs. 3.8%) and GPs were significantly more likely to report prescribing a new oral steroid only compared to GIs (26.9% vs. 10%; p=0.03). **CONCLUSIONS:** While a variety of treatment options are commonly used to treat UC flares, treatment patterns differed by physician specialty, even when adjusting for disease status. Further research is needed to understand how physician treatment patterns lead to different outcomes in order to improve UC management in the UK.

MENTAL HEALTH - Clinical Outcomes Studies

PMH1

ANTAGONISTIC DRUG PRESCRIBING: CHOLINESTERASE INHIBITORS AND ANTICHOLINERGICS

Huisman L, Dijkstra H, Vegter S

University of Groningen, Groningen, The Netherlands

OBJECTIVES: Drugs from opposing pharmacologic classes should not be combined as this may reduce the effectiveness of one or both drugs. Physicians and pharmacists may however be tempted to treat adverse drug effects from one drug class with an opposing drug class. Cholinesterase inhibitors, used for the treatment of dementia, may cause urinary incontinence, which may in turn be treated with anticholinergic spasmolytics. The objective of this study was to determine whether this inappropriate prescribing cascade occurs in clinical practice. **METHODS:** Prescription data from community pharmacies between 2000 and 2012 were retrieved from the IADB.nl database in The Netherlands. Patients receiving anticholinergic spasmolytics were selected as cases. Each case was matched to three controls on age and gender. A case-control design was used to determine whether cholinesterase inhibitors preceded prescription of anticholinergic spasmolytics. **RESULTS:** A total of 10,989 patients initiated treatment with anticholinergic spasmolytics; these cases were matched to 32,967 controls. Patients receiving cholinesterase inhibitors in the preceding year were more likely to receive anticholinergic spasmolytics, OR 5.6 (95% CI: 3.7–8.5). Results were not influenced by potential confounders and did not differ significantly between genders. Differences between cholinesterase inhibitor drugs were non-significant, with OR ranging from 3.9 (1.4–10.4) for Galantamine to 6.6 (4.0–10.9) for Rivastigmine. **CONCLUSIONS:** This matched case-control study found that patients using cholinesterase inhibitors, for treatment of dementia, were more likely to receive anticholinergic spasmolytics to manage urinary incontinence. Coprescription of these antagonistic drug classes constitutes illogical pharmacotherapy and may increase the decline in mental status of patients. Therefore, other treatments should be preferred for these patients. The correct management of drugs with opposing pharmacologic properties is an important aspect of pharmaceutical care for patients with dementia.

PMH2

INTERIM RESULTS FROM THE "AUTOR" STUDY, A EUROPEAN OBSERVATIONAL STUDY IN PEDIATRIC PATIENTS WITH ATTENTION DEFICIT/HYPERACTIVITY DISORDER: PATIENT CHARACTERISTICS AND 1-YEAR COSTS

Haynes V¹, Quail D², Lorenzo M², Deix C³, Anand H²

¹Eli Lilly and Company, Indianapolis, IN, USA, ²Eli Lilly and Company, Surrey, UK, ³Eli Lilly and Company, Vienna, Austria

OBJECTIVES: To characterize patient sample, treatment patterns, and provide 1-year costs of an ongoing observational study of pediatric Attention Deficit/Hyperactivity Disorder (ADHD) patients in Europe. **METHODS:** AUTOR is a European observational study investigating factors associated with ADHD severity changes across a 2-year follow-up period in patients aged 6–17 that are stable responders on their first pharmacotherapy. At baseline, patients must have taken their ADHD medication for 3–8 months and have a Clinical Global Impression Severity score ≤3 and Improvement score ≤2 compared to treatment initiation. Data were collected at months 0, 3, 6, 9, 12, 18, and 24. UK unit costs of health & social care (PSSRU 2011) were used for analysis. **RESULTS:** A total of 703 patients (Italy: 224 [32%], Romania: 196 [28%], Greece: 125 [18%], UK: 72 [10%], Slovenia: 42 [6%], Sweden: 21 [3%], The Netherlands: 17 [2.4%], Denmark: 6 [1%]) were analyzed (98 out of 801 failed to meet entry criteria). Patient characteristics: mean (SD) age 10.7 (2.7) years, 99% Caucasian, 82% male, 76% combined ADHD subtype. Most prominent baseline comorbidities: oppositional defiant disorder (28%), anxiety (15%), dyslexia (20%), and other learning disorders (33%). Baseline medication: Stimulants=298 patients (51% methylphenidate, 49% long-acting methylphenidate), atomoxetine=393 patients, other pharmacotherapy=8 patients, drug combination=4 patients. Mean (SD) treatment duration before baseline: 4.9 (1.5) months. Mean (SD) total costs after 1 year: £7520 (7374.5), split into £3618 (4171.7) direct costs excluding treatment (48%), £1783 (2933.6) treatment costs (24%), and £2119 (4911.2) indirect costs (28%). After 1 year, 82 patients (12%) have discontinued and 621 patients (88%) are ongoing. **CONCLUSIONS:** The AUTOR sample differs from clinical trials in its higher preva-